

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: ) Attorney Docket No. 911568660001  
Jerry Pettersson )  
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Application No.: 10/618,010 )  
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Filed: July 11, 2003 )  
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For: A HANDHELD DEVICE AND A )  
METHOD )  
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Examiner: Holton, Steven E. )  
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Art Unit: 2673 )  
 )  
Confirmation No.: 4389 )

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended) A handheld device (10), having a position sensing means (14) on a rear side (12) of said device (10) for reading position coordinate data (x, y, z) while manually moving said device (10) rear side (12) on a working surface (22), a display screen (20) on a front side (21) of said device (10), said position sensing means (14) controlling a cursor in the form of a digital camera (24) on said display (20), the device comprising by further: a device-to-cursor position coordinate data (x, y, z) conversion means provided to process the device coordinate data (x, y, z) in accordance to a preset ratio for scaled cursor (24) coordinate data (x, y, z), thus defining a cursor (24) movement which is in scaled correspondence with the device movement;

means for deploying scale factors for height measurement by means of said digital camera (14), provided by camera zooming, which automatically provides scale factors from one image to another and which provides the device with z-axis coordinates; and

a cursor (24) controller means for a cursor (24) movement across said display according to the scaled cursor (24) coordinate data (x, y, z); whereby the cursor (24) moves on the digital display concurrently as the device is manually moved across the surface in scaled correspondence with the movement pattern of the device.

Claim 2 (Currently Amended)      The [A ]device according to claim 1, wherein said cursor (24) is cancelled on the display thus providing movement in an arcade style game program ~~Areadian display environments~~.

Claim 3 (Currently Amended)      The [A ]device according to claim 1, wherein the device coordinate data (x, y, z) is constituted of relative surface position readings in the X and Y direction axes according to a suitable coordinate system.

Claim 4 (Cancelled)

Claim 5 (Cancelled)

Claim 6 (Cancelled)

Claim 7 (Cancelled)

Claim 8 (Cancelled)

Claim 9 (Cancelled)

Claim 10 (Cancelled)

Claim 11 (Currently Amended)      A method for a handheld device (10), having a position sensing means (14) in the form of a digital camera on a rear side (12) of said device (10) for reading position coordinate data (x, y, z) (x, y, z) while manually moving said device (10) rear side (12) on a working surface (22), a display screen (20) on a front side (21) of said device

(10), said position sensing means (14) controlling a cursor (24) on said display (20), comprising the steps of:

providing processing of device coordinate data (x, y, z) according to a preset ratio for scaled cursor (24) coordinate data (x, y, z), thus defining a cursor (24) movement which is in scaled correspondence with the device movement;

deploying scale factors for height measurement by means of said digital camera  
(14), provided by camera zooming, which automatically provides scale factors from one image  
to another and which provides the device with z-axis coordinates; and

controlling the cursor (24) during a cursor (24) movement across said display according to the scaled cursor (24) coordinate data (x, y, z);

whereby the cursor (24) moves on the digital display concurrently as the device is manually moved across the surface in scaled correspondence with the movement pattern of the device.

Claim 12 (Currently Amended)      The [A ]method for a device according to claim 11,  
wherein said cursor is cancelled on the display thus providing movement in arcade style game  
programs-Arcadian display environments.

Claim 13 (Currently Amended)      The [A] method for a device according to claim 11,  
wherein the device coordinate data is constituted of relative surface position readings in the X  
and Y direction axes according to a suitable coordinate system.

Claim 14 (Cancelled)

Claim 15 (Cancelled)

Claim 16 (Cancelled)

Claim 17 (Cancelled)

Claim 18 (Cancelled)

Claim 19 (Cancelled)

Claim 20 (Cancelled)

Claim 21 (New) The device according to claim 2 wherein the device coordinate data (x, y, z) is constituted of relative surface position readings in the X and Y direction axes according to a suitable coordinate system.

Claim 22 (New) The method for a device according to claim 12 wherein the device coordinate data is constituted of relative surface position readings in the X and Y direction axes according to a suitable coordinate system.